Monitoring Data Record

Project Title: R-2248BB – Charlotte Outer Loop COE Action ID: 200131321
Stream Name: UT Thomas Pond (Site 9) DWQ Number: 011231
City, County and other Location Information: Mecklenburg County, Charlotte Outer Loop, NC 27 Exit (Mount Holly Road)
Date Construction Completed: April 2005 Monitoring Year: (1) of 5
Ecoregion: 8 digit HUC unit 03050101
USGS Quad Name and Coordinates:
Rosgen Classification:
Length of Project: 1148 ft. Urban or Rural: Rural Watershed Size:
Monitoring DATA collected by: M. Green and J. Young Date: 9/3/08
Applicant Information:
Name: NCDOT – Roadside Environmental Unit
Address: 1425 Rock Quarry Rd, Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status:

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level **1**

Permit States: The permittee shall perform the following components of Level I monitoring each year for the 5-year monitoring period: Reference photos; plant survival (i.e. identify specific problem areas (missing, stressed, damaged or dead plantings), estimated causes, and proposed/required remedial action);visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall submit the monitoring reports to the USACE, Raleigh Regulatory Field Office Project Manager, within sixty days after completing the monitoring. If less than two bankfull events occur during the first 5 years, the permittee shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the five-year monitoring period, the USACE, in consultation with the resource agencies, may determine that further monitoring is not required. It is suggested that all bankfull occurrences be monitored and reported through the required monitoring period. The permittee shall perform and submit photo documentation twice each year (summer and winter) for the 5-year monitoring period, and for any subsequently required monitoring period.

Section 1. PHOTO REFERENCE SITES

(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site: 14 photos were taken from 7 photo point locations, plus 1 additional photo

Dates reference photos have been taken at this site: 2/6/08, 9/3/08

Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference: A site map with photo point locations is included with this report.

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL
Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:

ADDITIONAL COMMENTS: Streambank reforestation consisted of Type 1: Black Willow and Silky Dogwood and Type 2: Green Ash, Black Willow, Tulip Poplar, and Tag Alder. The stream relocation area inside Loop E noted last evaluation lacking some woody vegetation was supplementally planted with Green Ash, Swamp Chestnut Oak, and Sycamore on 3/12/08. All of the planted vegetation was noted surviving along the stream relocation, except for Tulip Poplar. Other vegetation noted included fennel, goldenrod, cattail, jewelweed, redbud, *Juncus* sp., *Scripus* sp., sweetgum, pine, and various grasses.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

UT Thomas Pond stream relocation is stable for the Year 1 Summer evaluation. The crossvane at Photo Point #1 (Upstream) has water piping under crossvane but the stream is stable at this time. There was also some minor bank scouring at the outlet end of the box culvert at Sta 219+80 -L- on the left and right bank (additional photo showing this area) noted last monitoring evaluation. This area has begun to stabilize with some herbaceous and woody vegetation. There is evidence that a bankfull event has occurred since the last monitoring evaluation. NCDOT will continue to monitor this stream relocation for channel stability.

Date 9/3/08	Station 17+40 Y-10	Station Number	Station Number	Station Number	Station Number
Structure Type	Crossvane @ inlet of pipe				
Is water piping through or around structure?	Water is piping under crossvane.				
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

UT Thomas Pond

Photo Point #1 (Upstream)

Photo Point # 1 (Downstream)

Photo Point # 2 (Upstream)

Photo Point #2 (Downstream)

Photo Point #3 (Upstream)

Photo Point #3 (Downstream)

Year 1 Summer- September 2008

UT Thomas Pond

Photo Point # 4 (Upstream)

Photo Point #4 (Downstream)

Photo Point #5 (Upstream)

Photo Point #5 (Downstream)

Photo Point #6 (Upstream)

Photo Point #6 (Downstream)

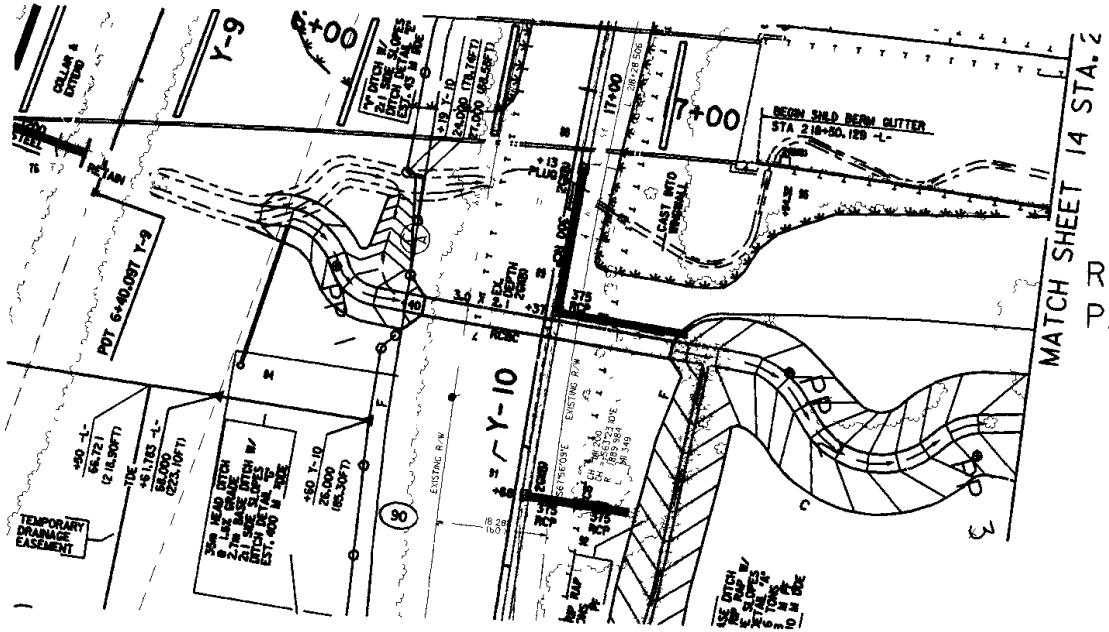
Year 1 Summer – September 2008

UT Thomas Pond

Photo Point #7 (Upstream)

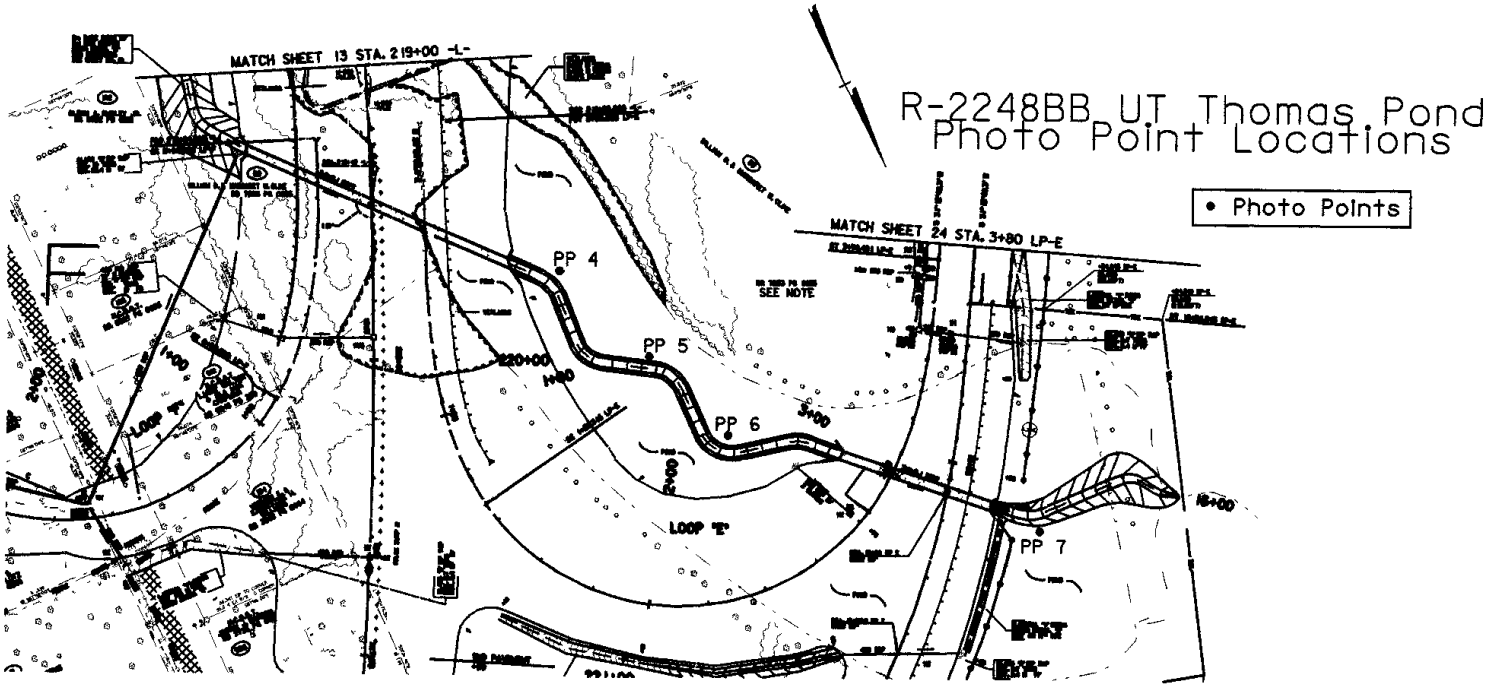
Photo Point #7 (Downstream)

Bank Scouring @ Sta. 219+80-L- noted last evaluation that has begun to stabilize with herbaceous and woody vegetation



R2248BB UT Thomas Pond
Photo Point Locations

⊕ Photo Points



R-2248BB UT Thomas Pond
Photo Point Locations

• Photo Points